International Application No.: PCT/GB2003/002937

Filed: 7 July 2003

Page 4

In the Claims:

This listing of claims will replace all prior versions and listings of the claims in this application.

Listing of Claims

- 1. (Original) Use of HCVp7, a variant, functionally effective fragment or a mutation thereof in screening candidate compounds that inhibit or increase ion channel activity.
- 2. (Original) Use according to claim 1 wherein HCVp7 is coupled to a poly(amino acid) sequence.
- 3. (Currently Amended) Use according to claim 2 wherein the poly(amino acid) sequence linker comprises a basic natural amino acid selected from the group comprising consisting of ARG, LYS or and HIS.
- 4. (Currently Amended) Use according to either claim 2 or claim 3 wherein the poly(amino acid) sequence is a polyHIS sequence.
- 5. (Original) Use according to claim 4 wherein the polyHIS sequence comprises at least 2 and up to 50 residues.
- 6. (Original) Use according to claim 5 wherein the polyHIS sequence comprises at least 2 and up to 10 residues
- 7. (Currently Amended) Use according to any preceding claim 1 wherein HCVp7 is incorporated into or comprised in a membrane.
- 8. (Original) Use according to claim 7 wherein the membrane is a black lipid membrane.

International Application No.: PCT/GB2003/002937

Filed: 7 July 2003

Page 5

9. (Currently Amended) Use according to any one of claim 1 to 6 wherein a nucleic acid encoding the HCVp7 protein, variant, functionally effective fragment or a mutation thereof is incorporated into or comprised in a viral system.

- 10. (Currently Amended) A method of screening for compounds that inhibit or enhance ion channel activity comprising the steps of:
 - (i) contacting a membrane comprising a HCVp7 protein or a viral system including comprising a nucleic acid encoding an HCVp7 protein with a candidate compound; and
 - (ii) measuring ion channel activity across said membrane or in \underline{a} viral system.
- 11. (Currently Amended) A method of screening a compound for efficacy of inbihition inhibition or enhanced ion channel activity comprising the steps of:
 - contacting a membrane comprising a HCVp7 protein or a viral system including comprising a nucleic acid encoding an HCVp7 protein with a candidate compound; and
 - (ii) comparing the activity of said candidate compound with a standard.
 - 12. (Canceled)
- 13. (Original) Use of HCVp7 in the assessment of ion channel formation by p7 variants and/or mutants thereof.
 - 14. (Canceled)
- 15. (Currently Amended) A compound identified according to the method of any one of claims claim10-to-12.

International Application No.: PCT/GB2003/002937

Filed: 7 July 2003

Page 6

16. (Currently Amended) An antiviral therapeutic agent as identified by the method

any one of claims claim 10 to 12.

17. (Currently Amended) Use of a therapeutic agent identified by the method any one

of claims claim 10-to-12 in the preparation of a medicament for the treatment of a viral infection.

18. (Currently Amended) Use of a therapeutic agent identified by the method any one

of claims claim 10 to 12 in the preparation of a medicament for the treatment of hepatitis.

19. (Currently Amended) Use of a therapeutic agent identified by the method of any

one of claims claim 10 to 12 in the preparation of a medicament for the treatment of hepatitis C

virus (HCV) infection.

20. (Original) Use of an antibody directed against HCVp7 as an inhibitor of channel

ion activity, pharmaceutical preparations thereof and use therefor in the manufacture of a

medicament for the treatment of hepatitis C virus (HCV) infection.

21. (Original) A membrane incorporating HCVp7, a variant, functionally effective

fragment or a mutation thereof that retains ion channel forming capability.

22. (Canceled)

23. (Currently Amended) Use of a membrane according to either claim 21 or 22 in

screening candidate compounds that inhibit or increase ion channel activity.

24. (Currently Amended) Use of a membrane according to any one of claims

claim 21 to 23 in the method of any one of claims claim 10 to 12.

25. (New) A compound identified according to the method of claim 11.

International Application No.: PCT/GB2003/002937

Filed: 7 July 2003

Page 7

- 26. (New) An antiviral therapeutic agent as identified by the method of claim 11.
- 27. (New) Use of a therapeutic agent identified by the method of claim 11 in the preparation of a medicament for the treatment of a viral infection.
- 28. (New) Use of a therapeutic agent identified by the method of claim 11 in the preparation of a medicament for the treatment of hepatitis.
- 29. (New) Use of a therapeutic agent identified by the method of claim 11 in the preparation of a medicament for the treatment of hepatitis C virus (HCV) infection.
 - 30. (New) Use of a membrane according to claim 21 in the method of claim 11.